

Business management  
and accounting team

Requirements analysis and  
simulation team

Design team

Fabrication team

Other engineering teams

Initial idea

R&D/  
Design  
tradeoff  
studies

Design 1  
Design 2

Interactive process of  
engineering analysis and  
simulation resulting in design  
modifications and reanalysis/  
resimulation

Design n

Final product  
produced in quantity

Prototype  
production

Design team

Figure 1

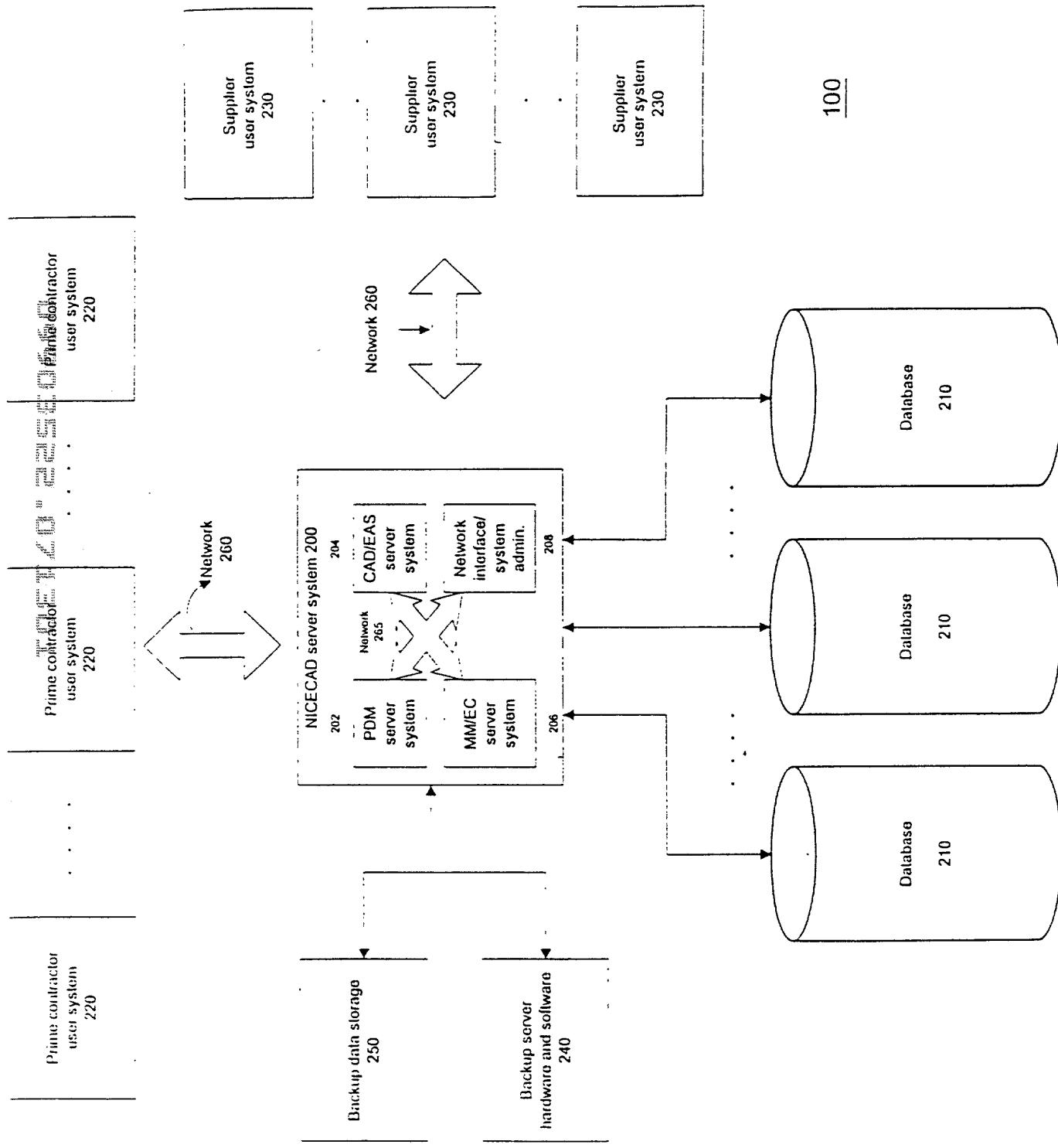


Figure 2

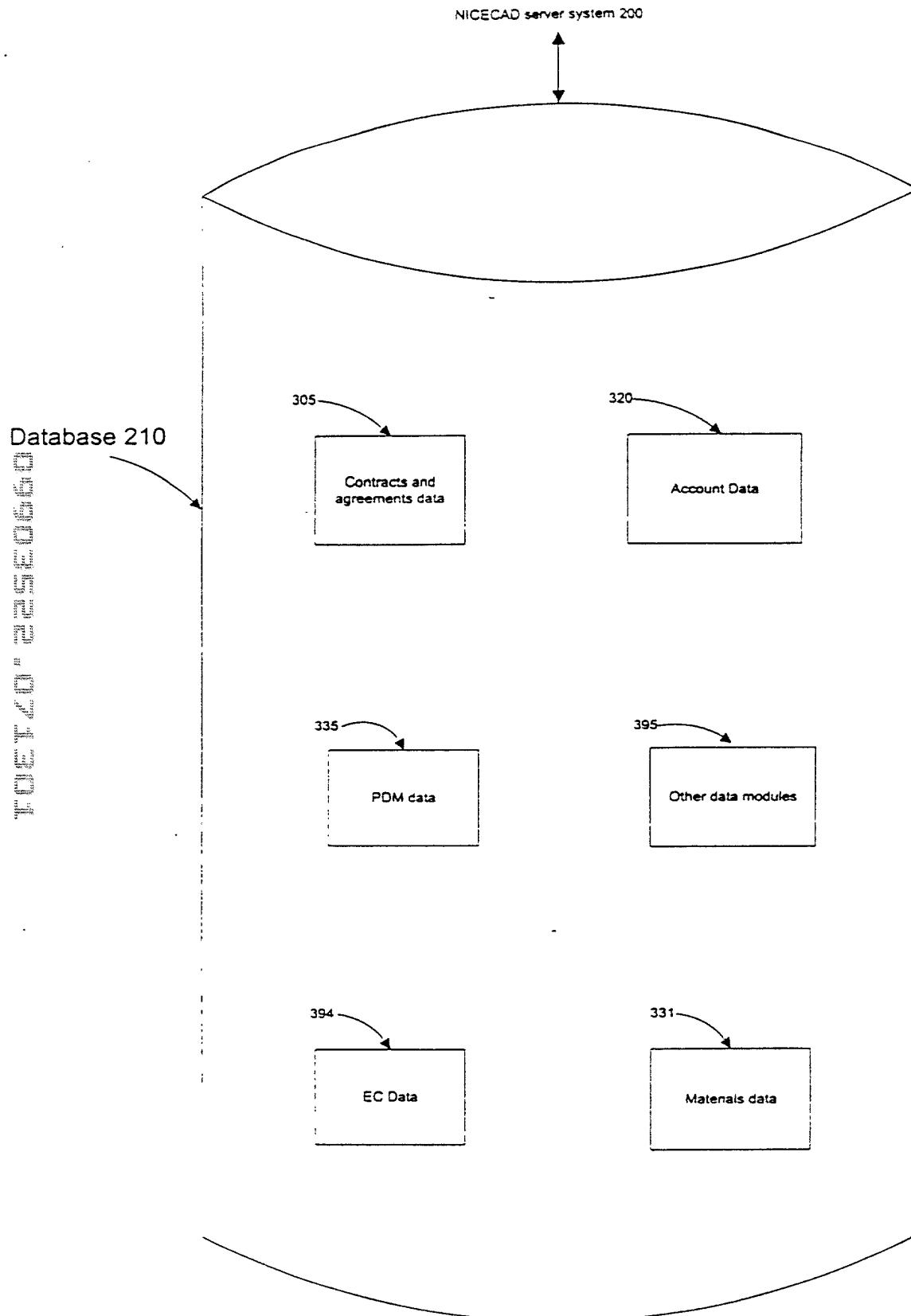


Figure 3

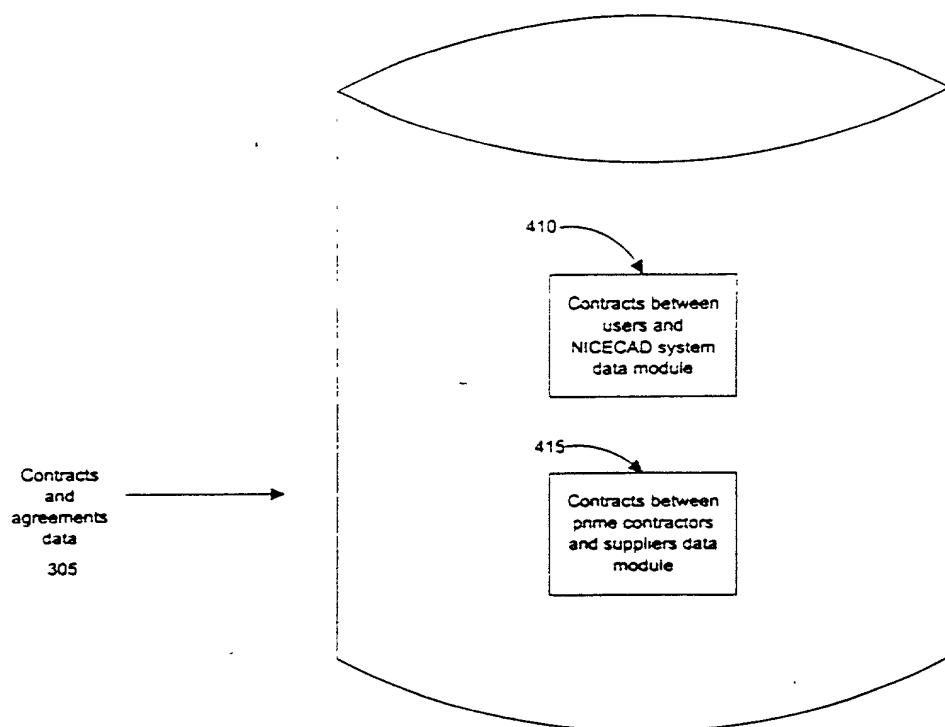


Figure 4

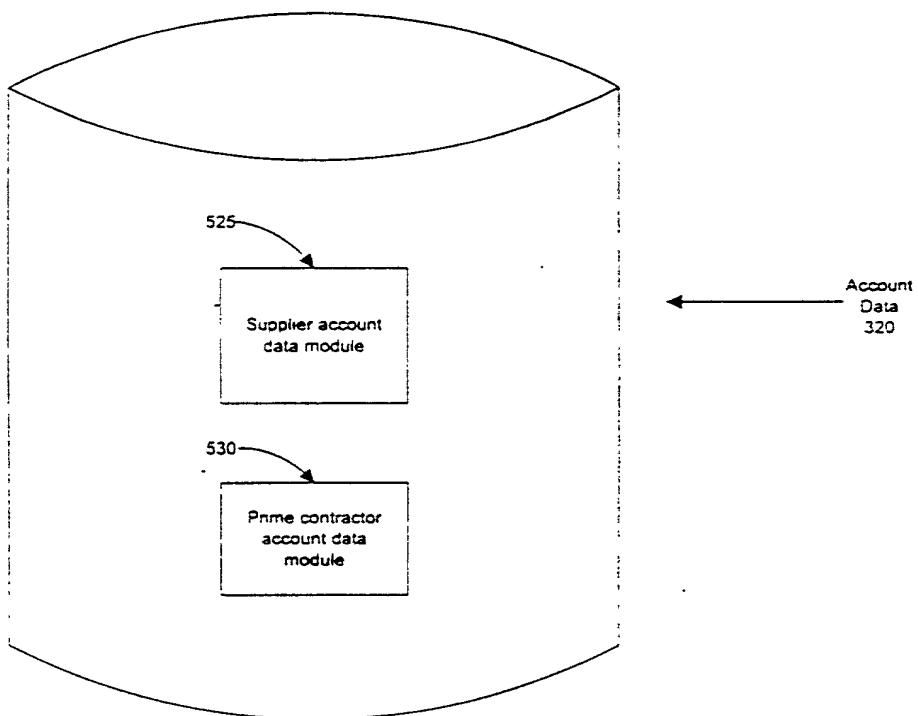


Figure 5

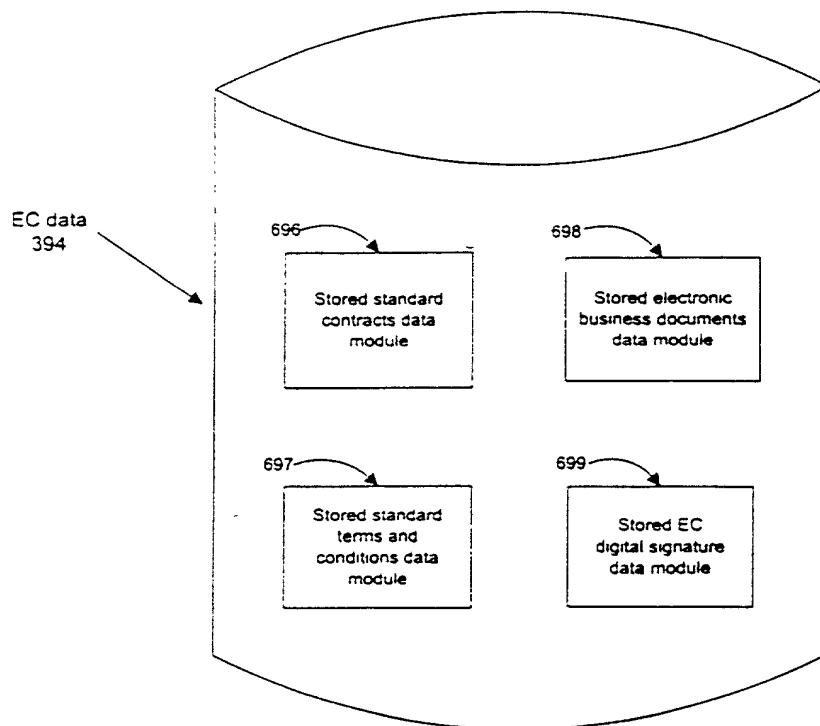


Figure 6

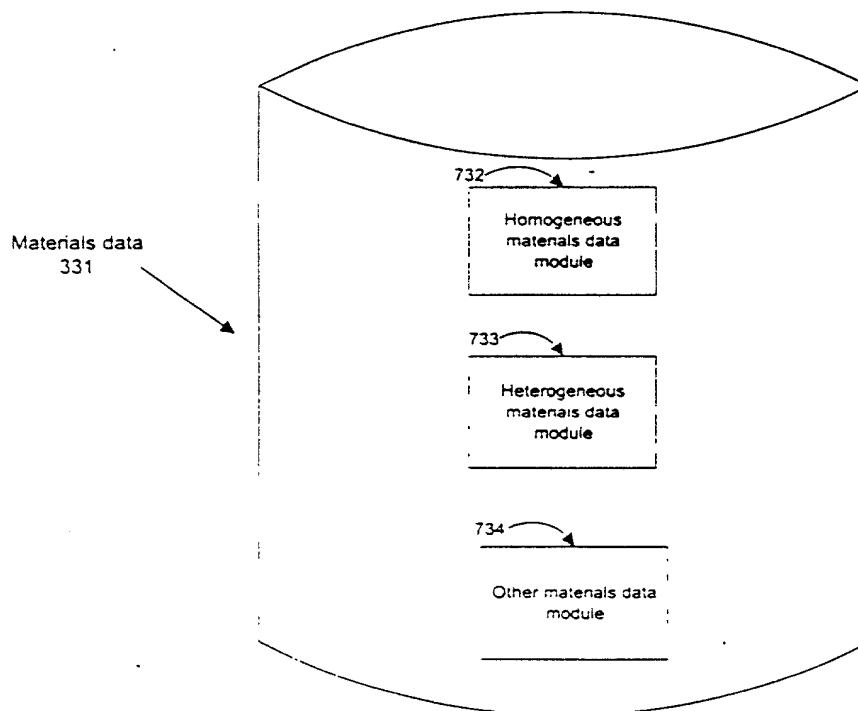


Figure 7

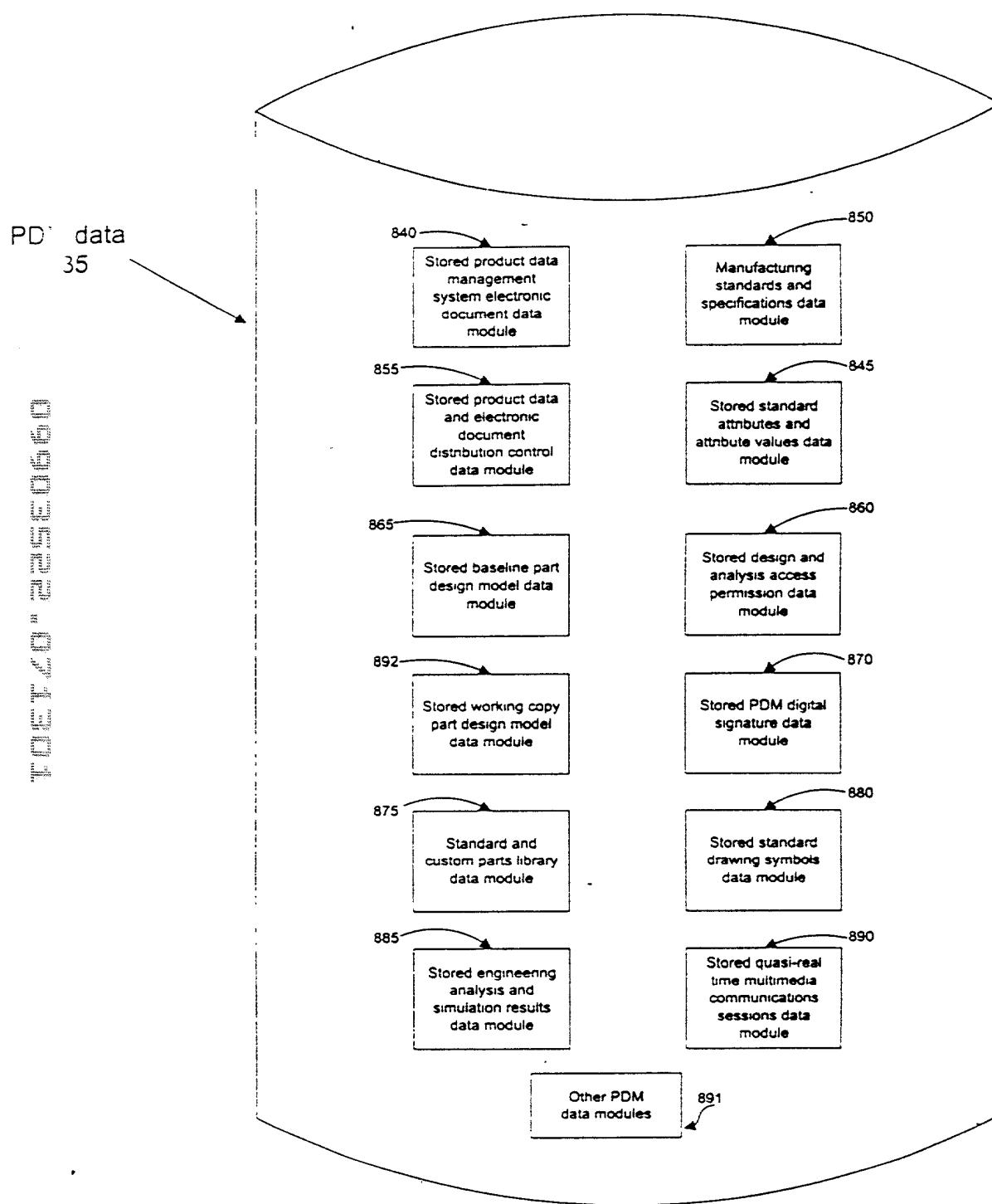
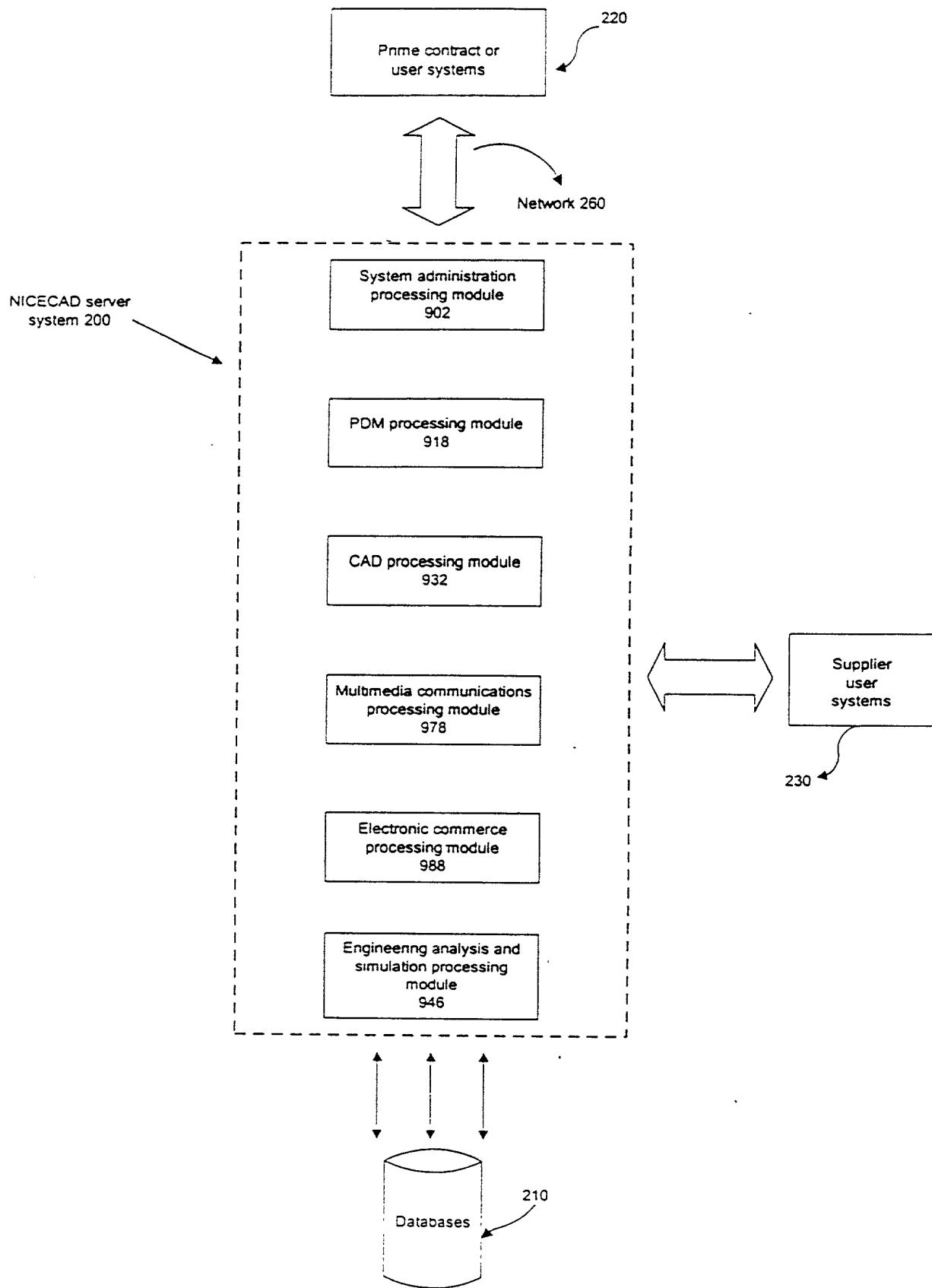


Figure 8



**Figure 9**

00000000000000000000000000000000  
System administration processing module  
902

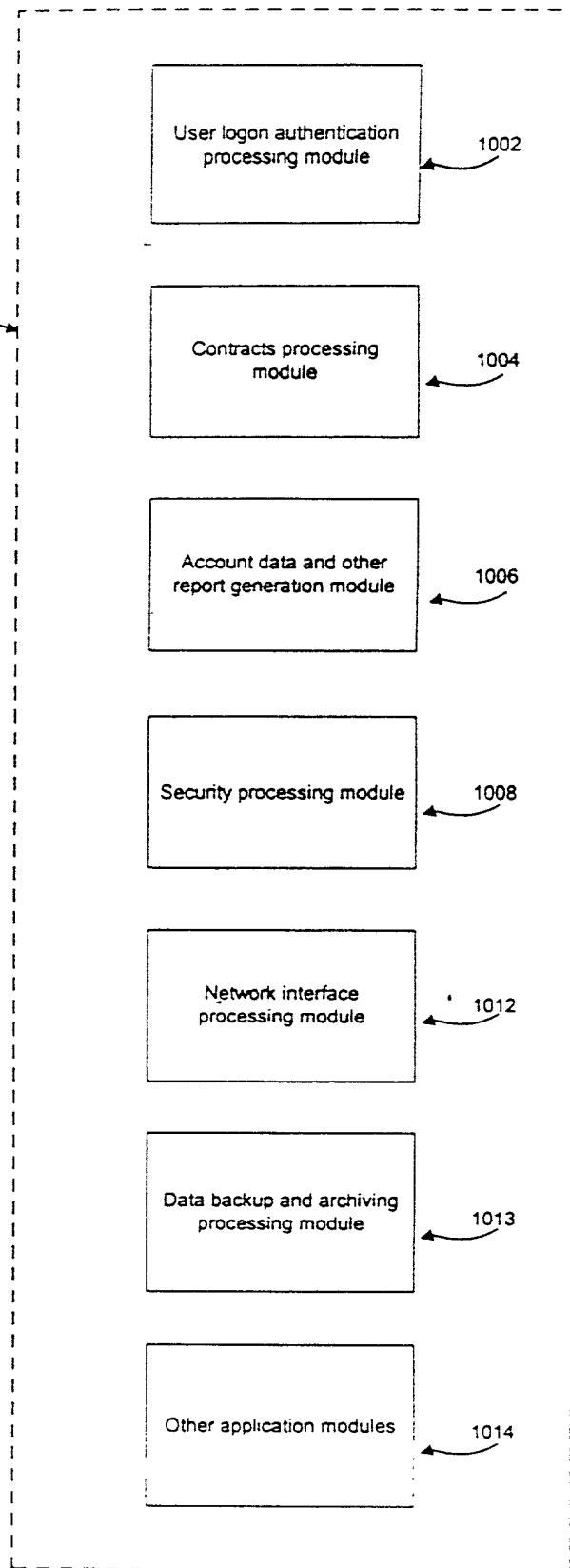


Figure 10

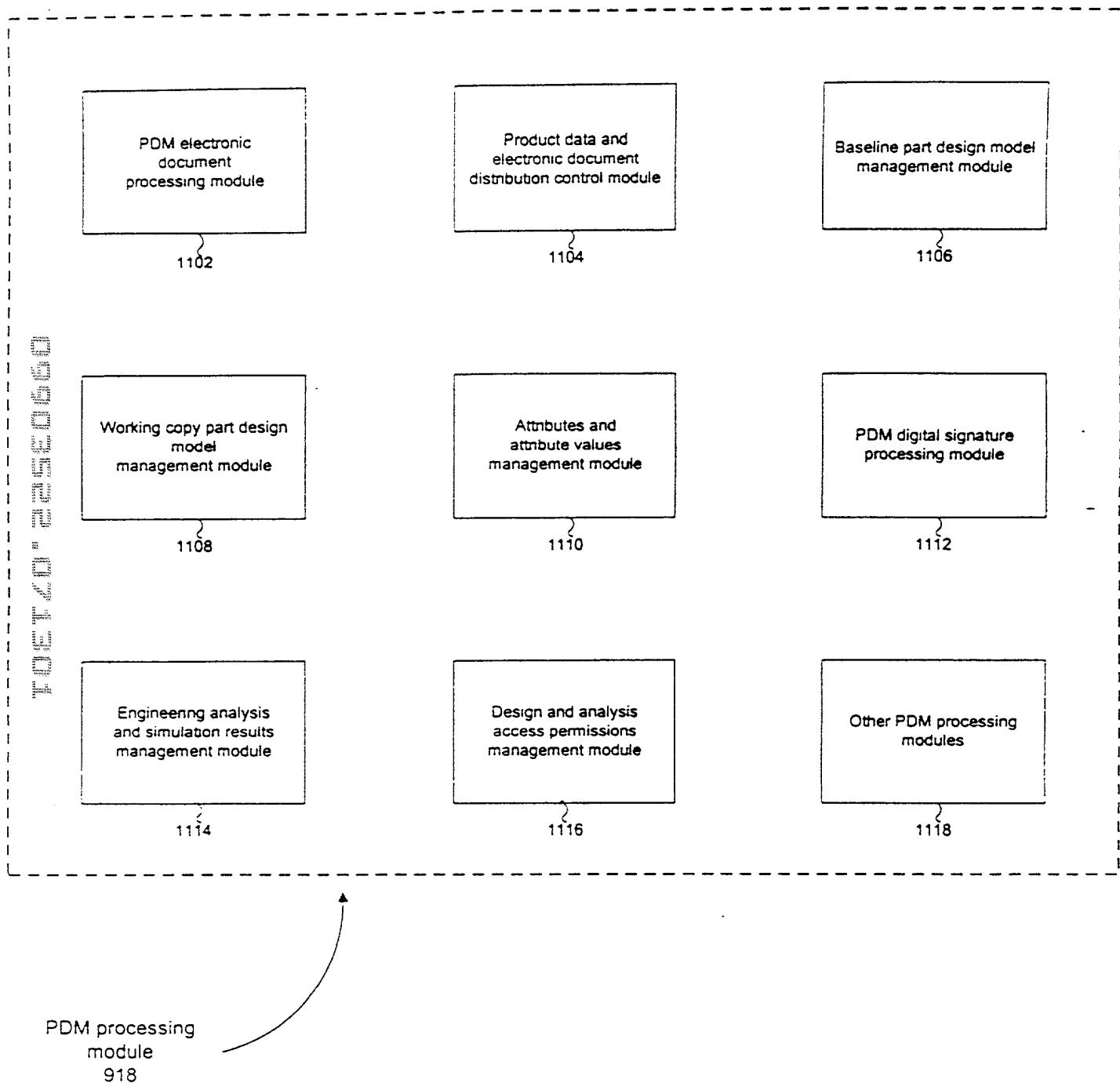


Figure 11

CAD processing  
module  
932

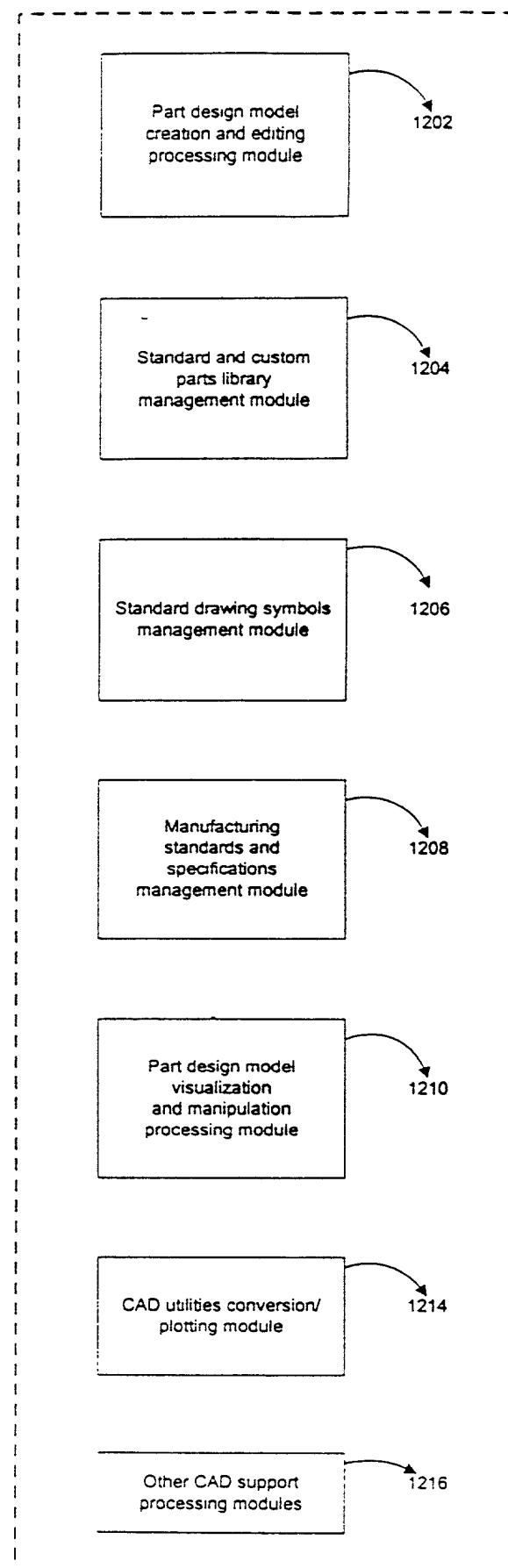


Figure 12

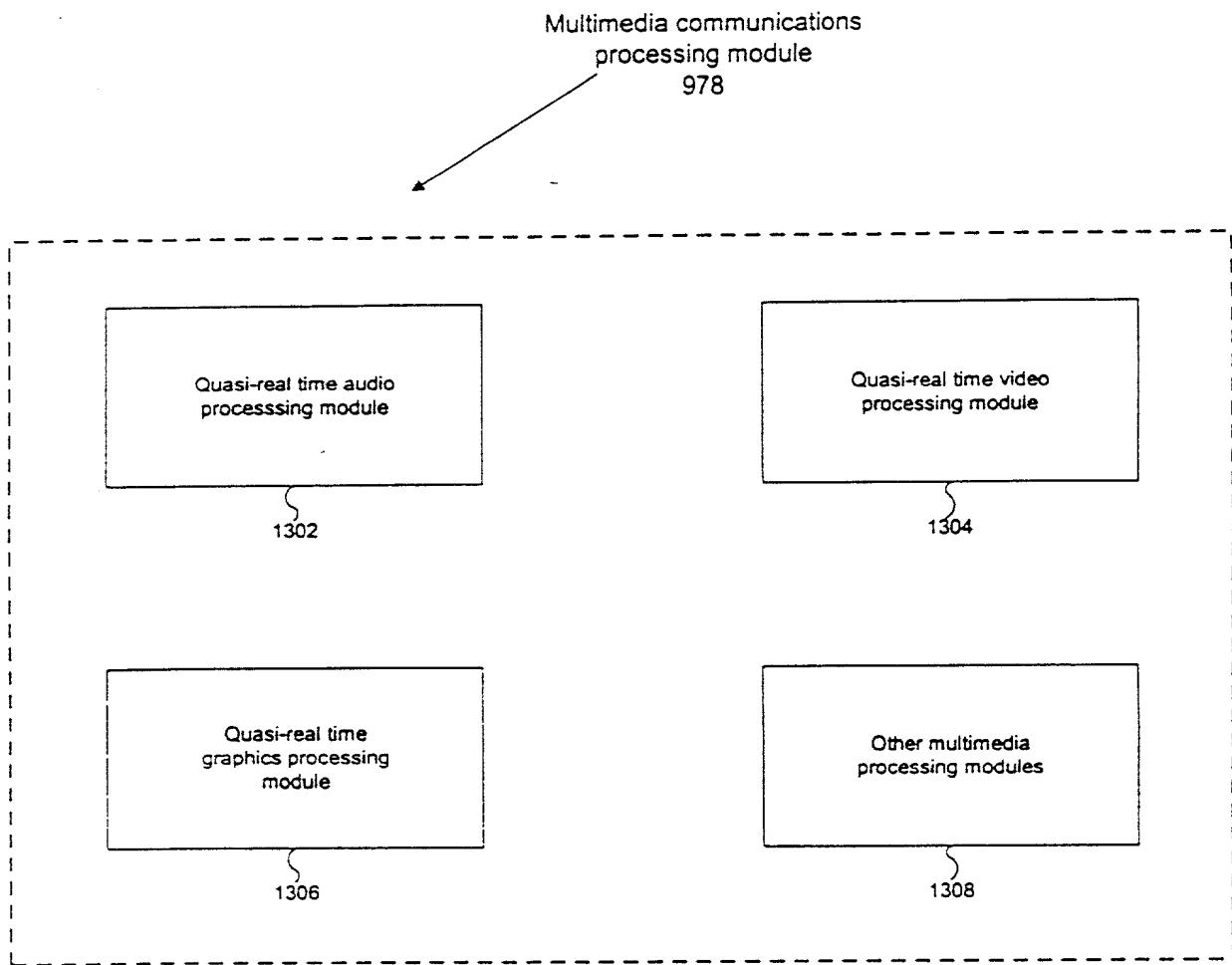


Figure 13

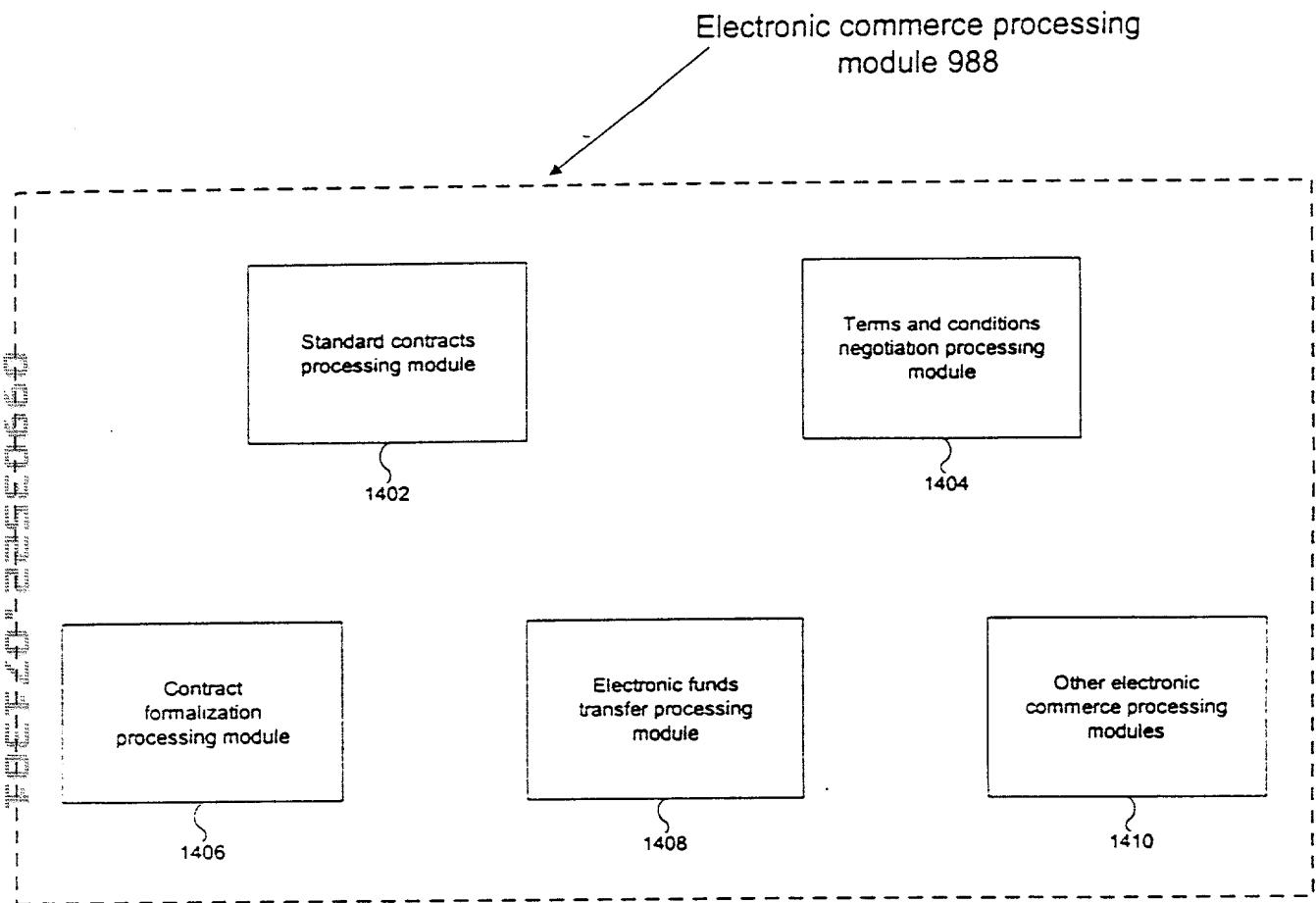


Figure 14

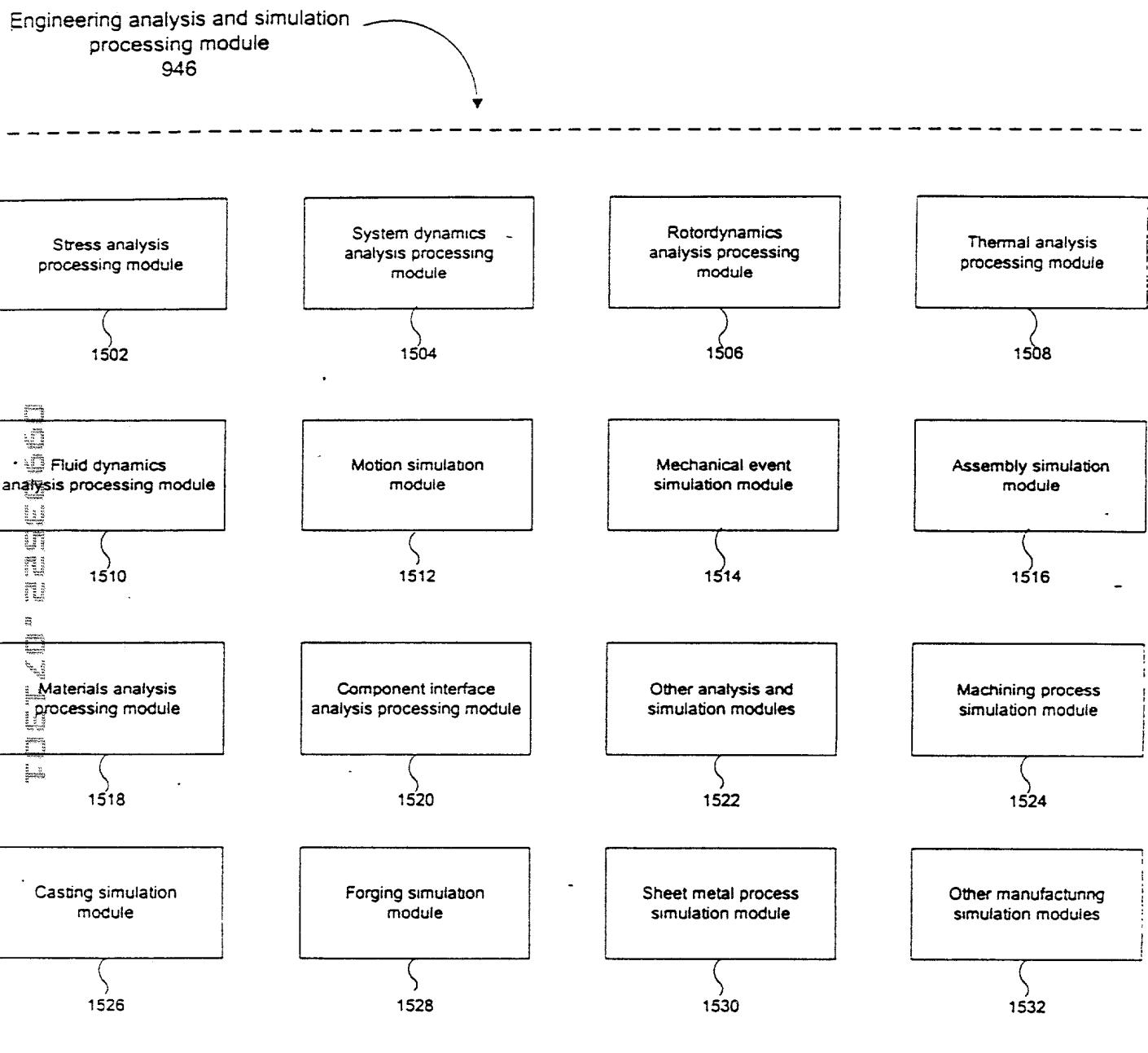


Figure 15

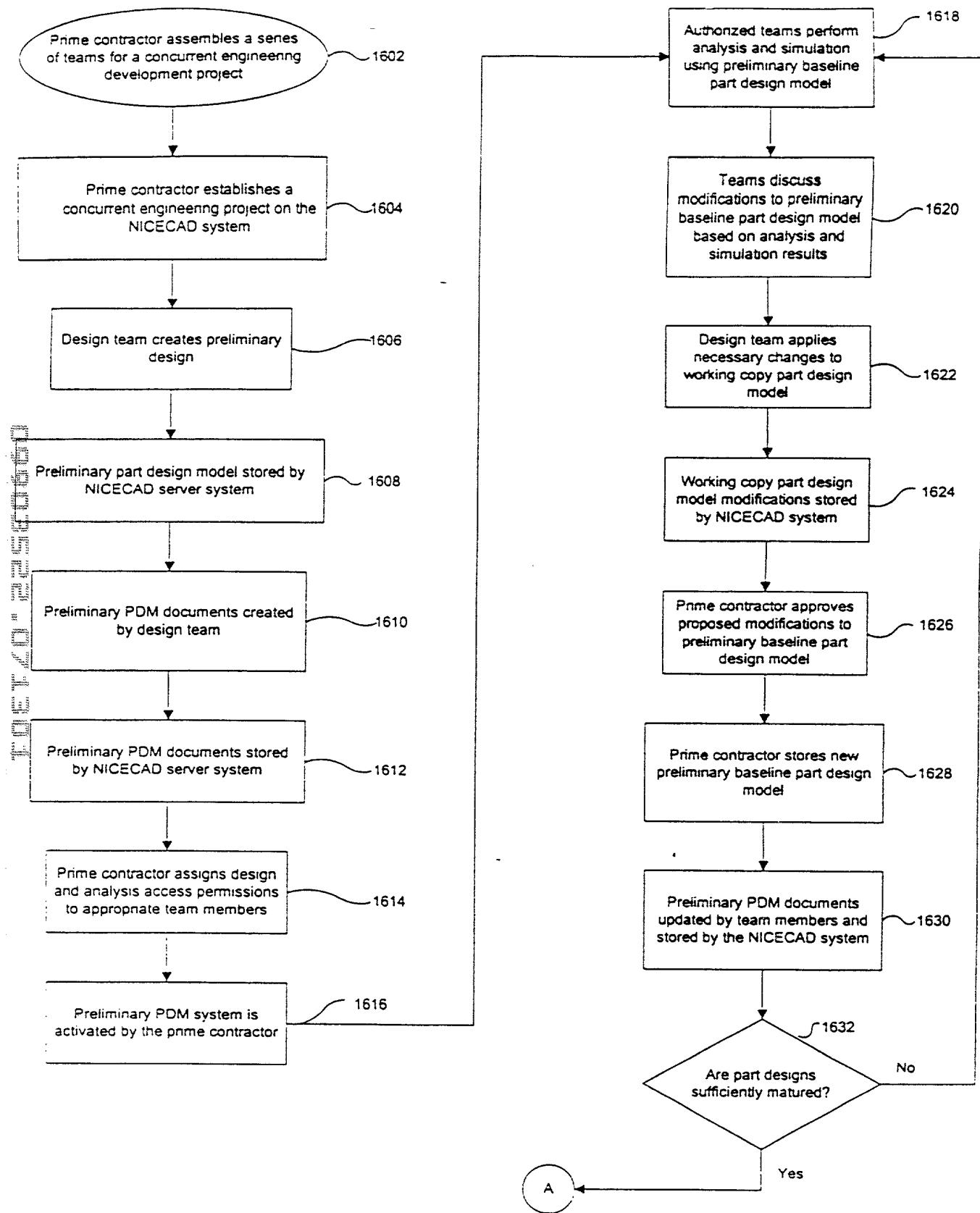


Figure 16A

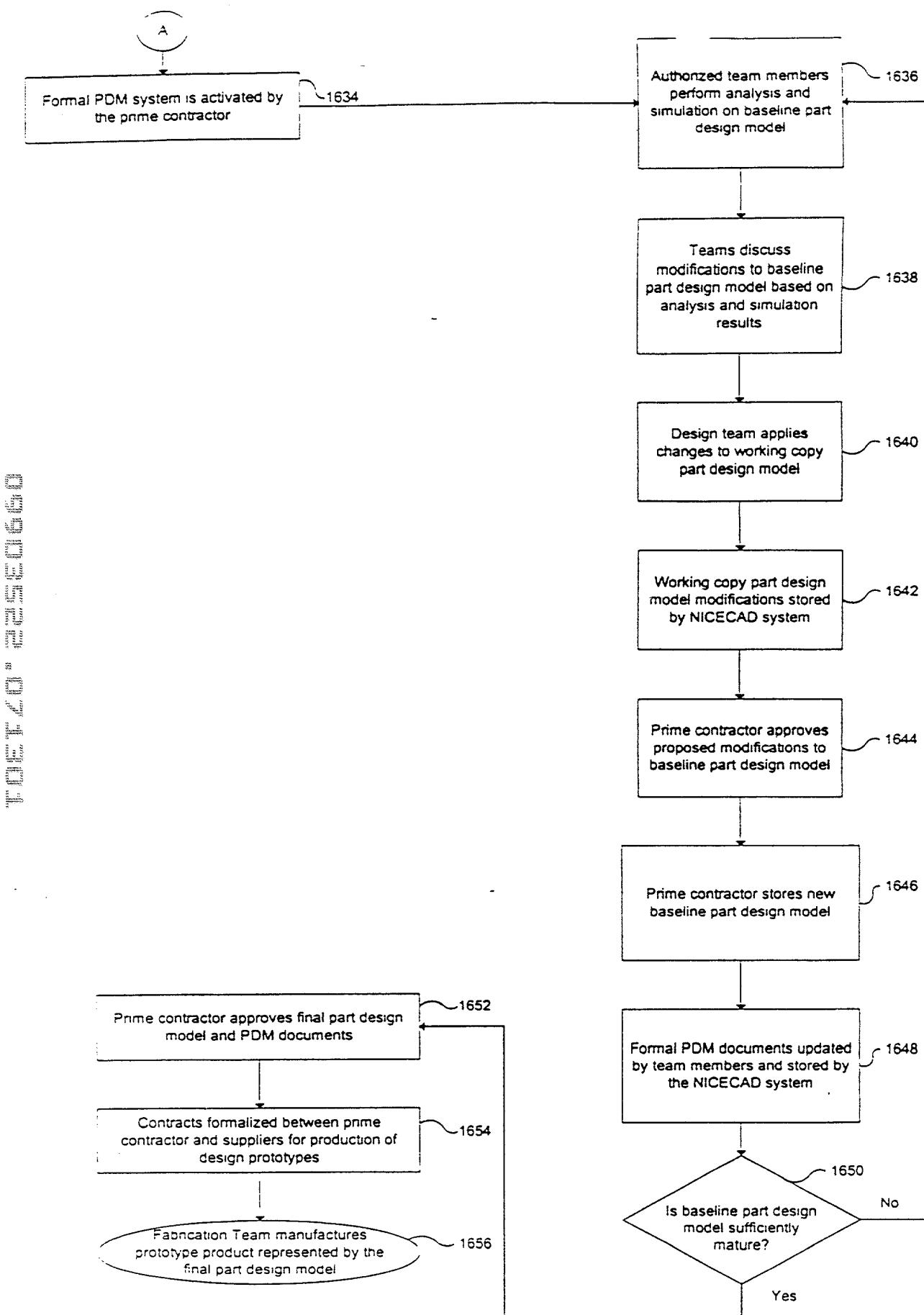


Figure 16B

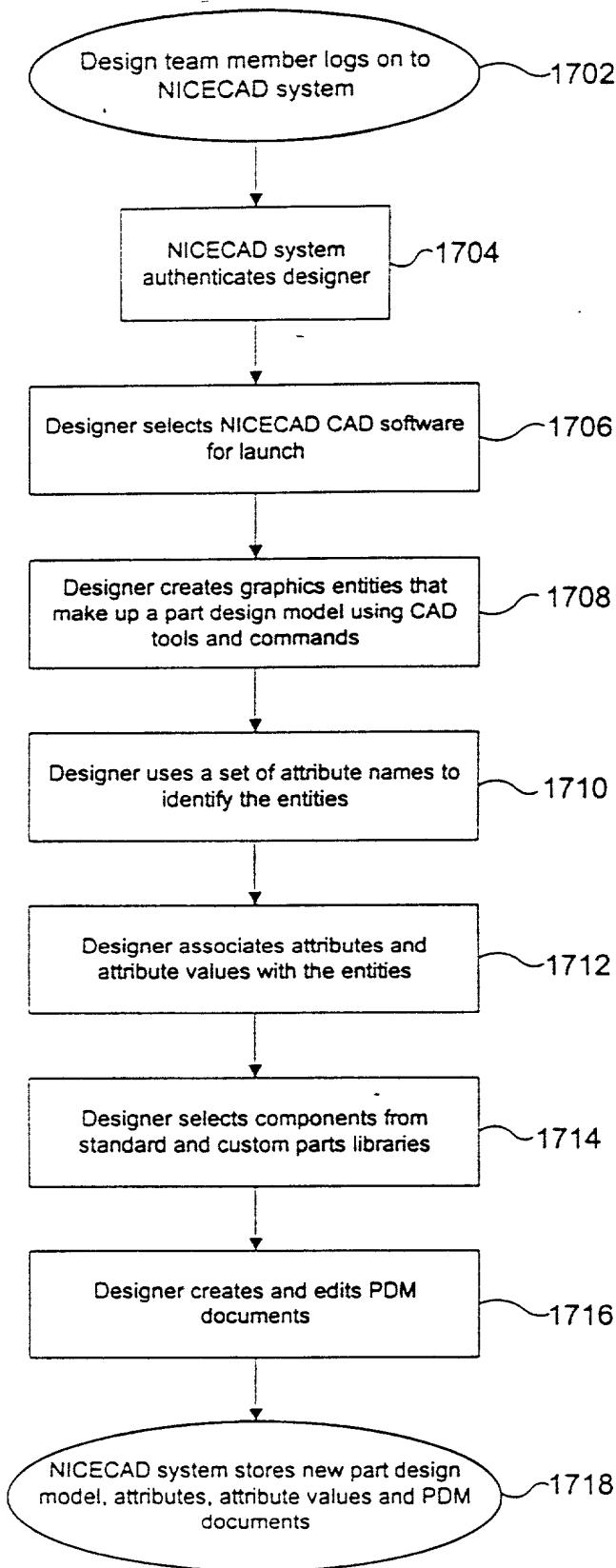


Figure 17

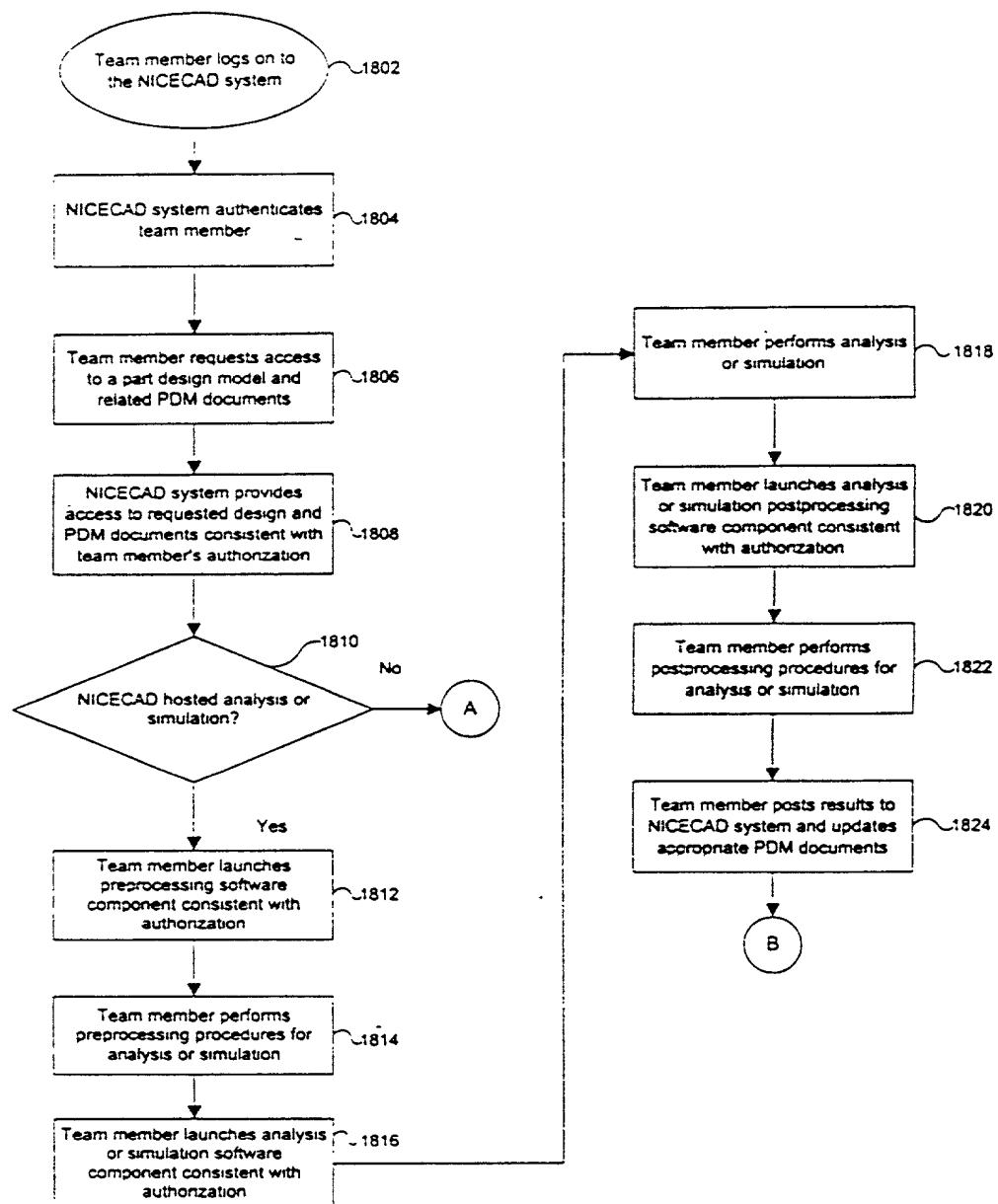


Figure 18A

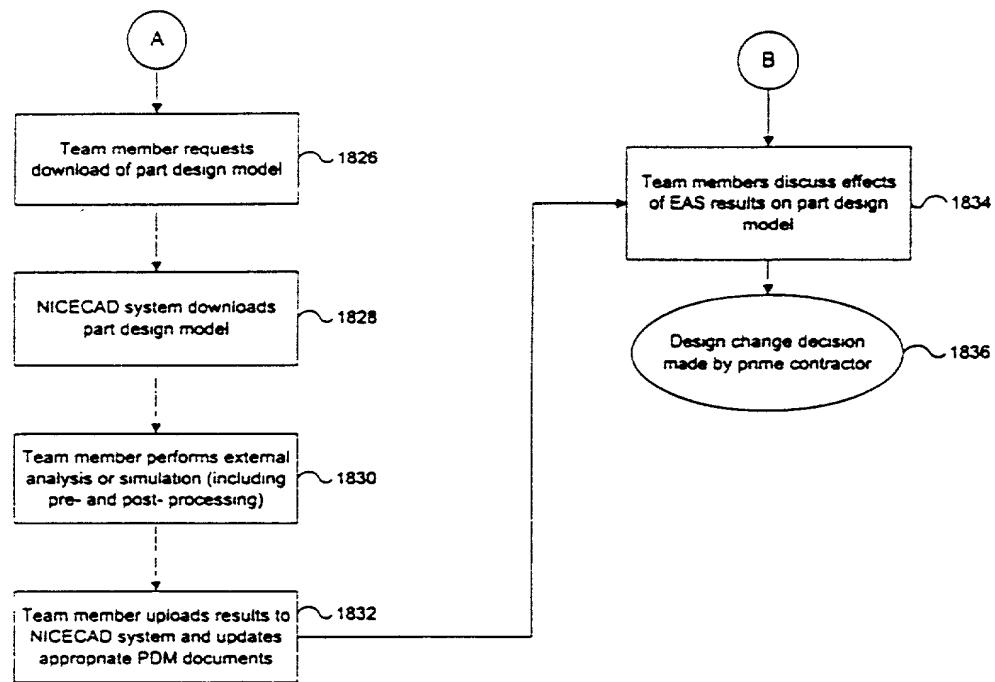


Figure 18B

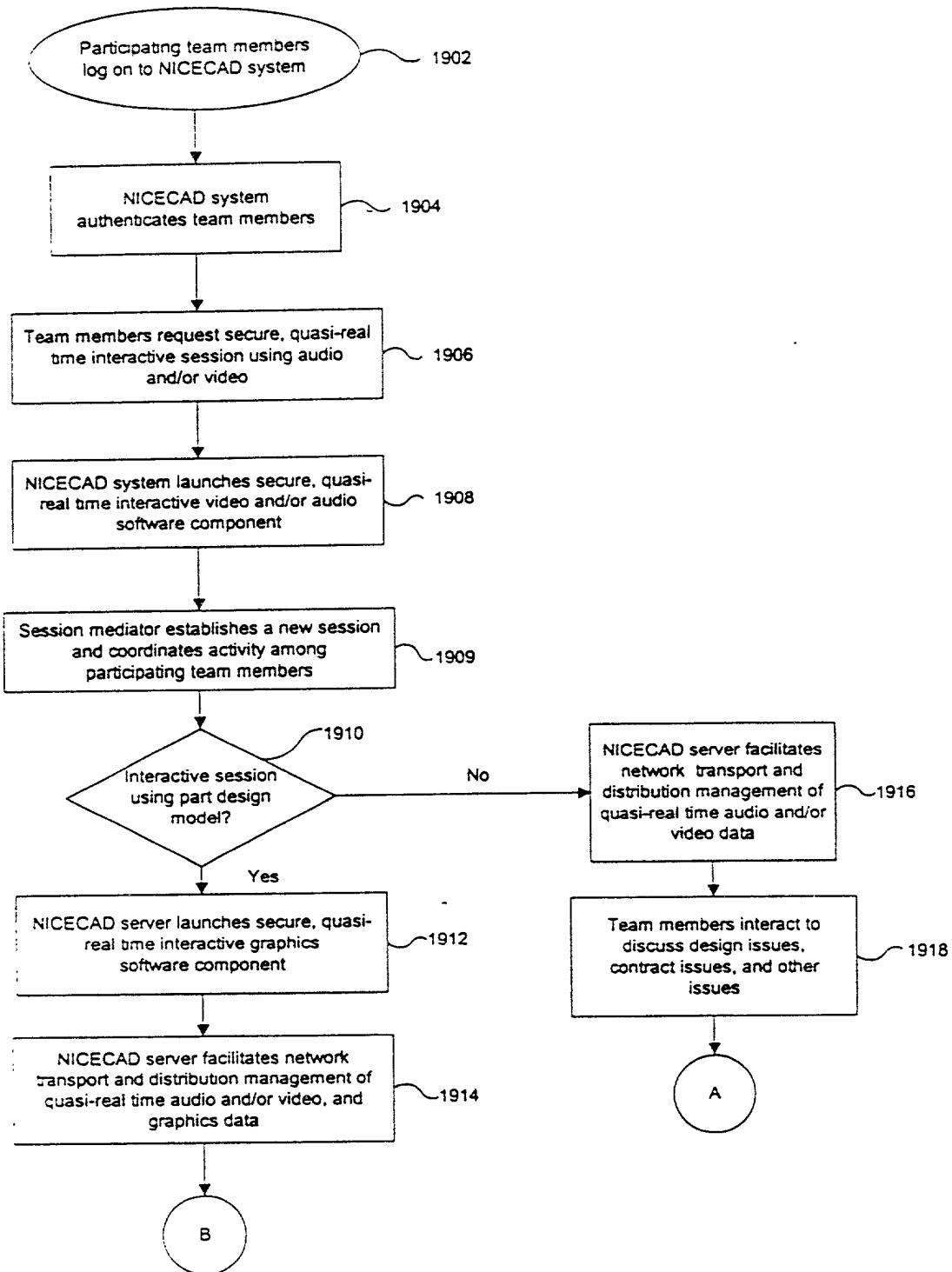


Figure 19A

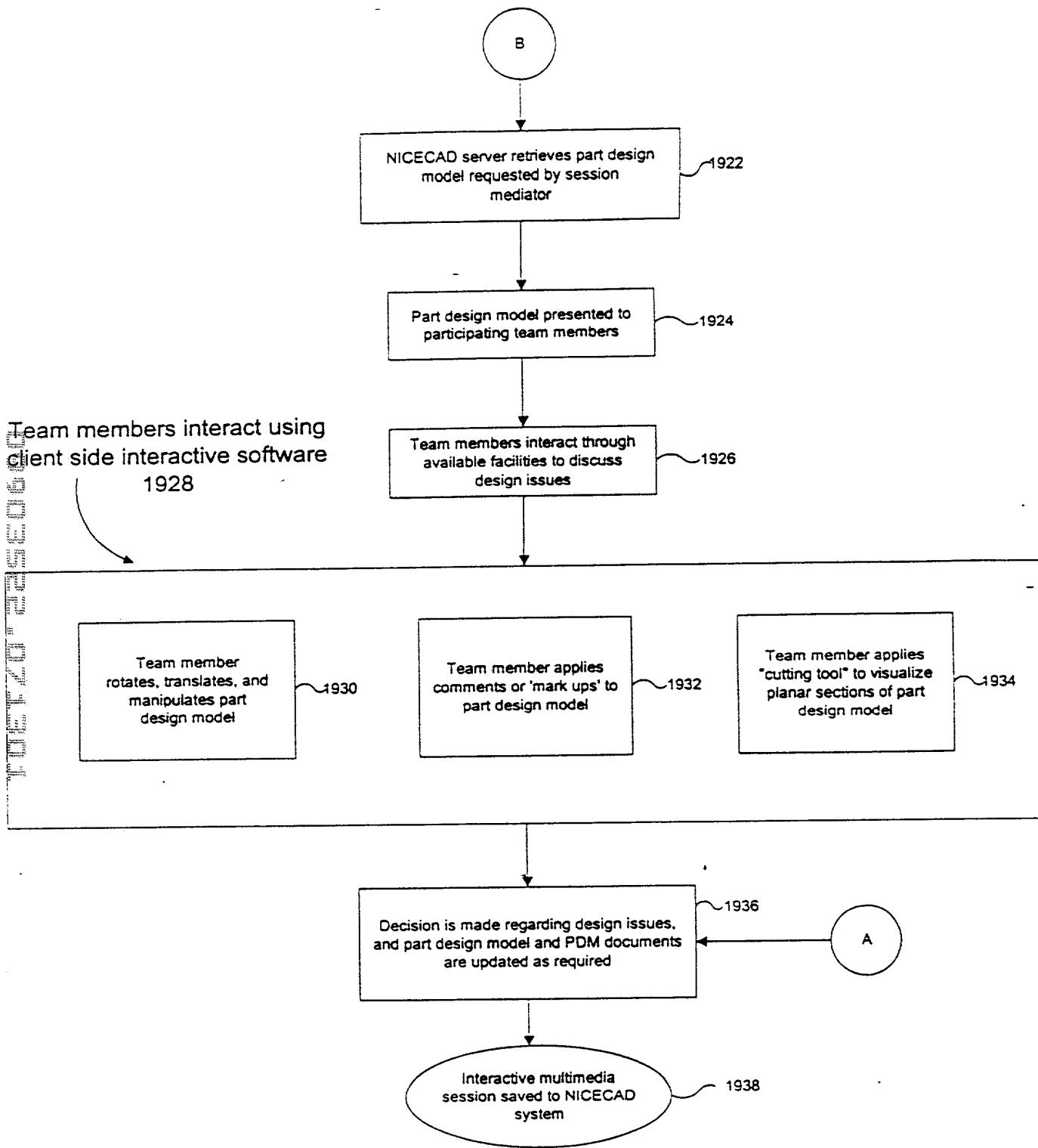


Figure 19B

Fig. 20

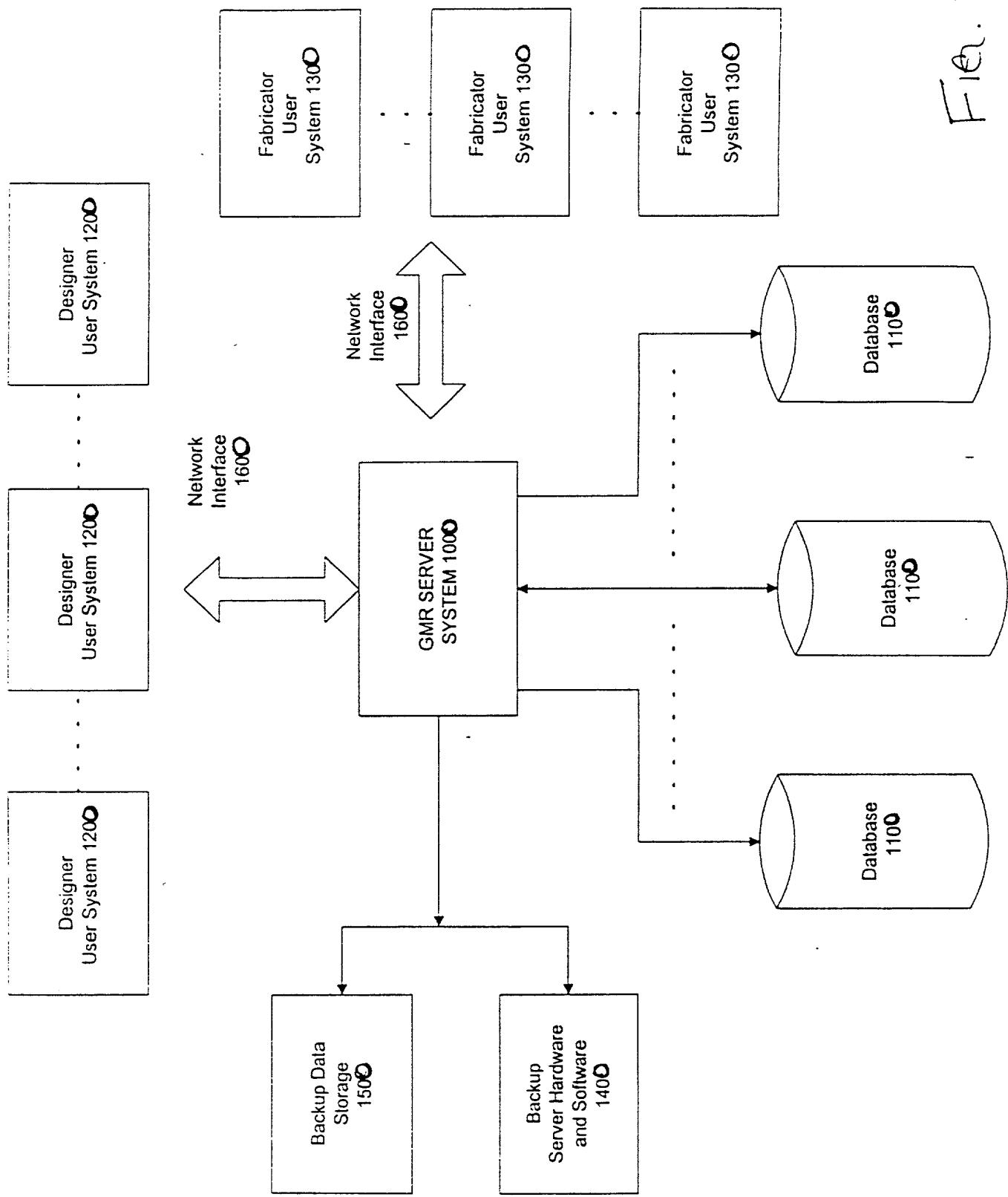
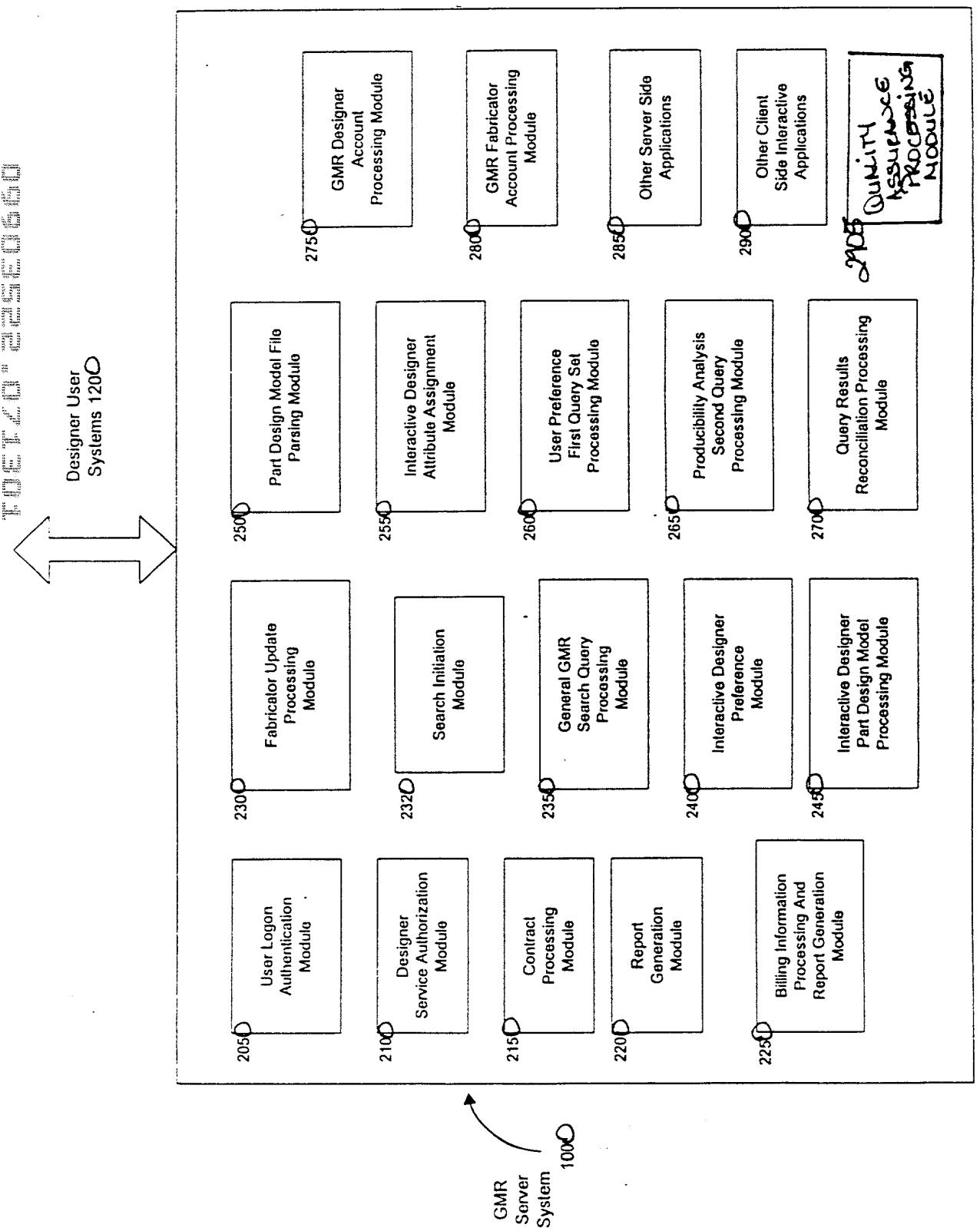


Fig. 21



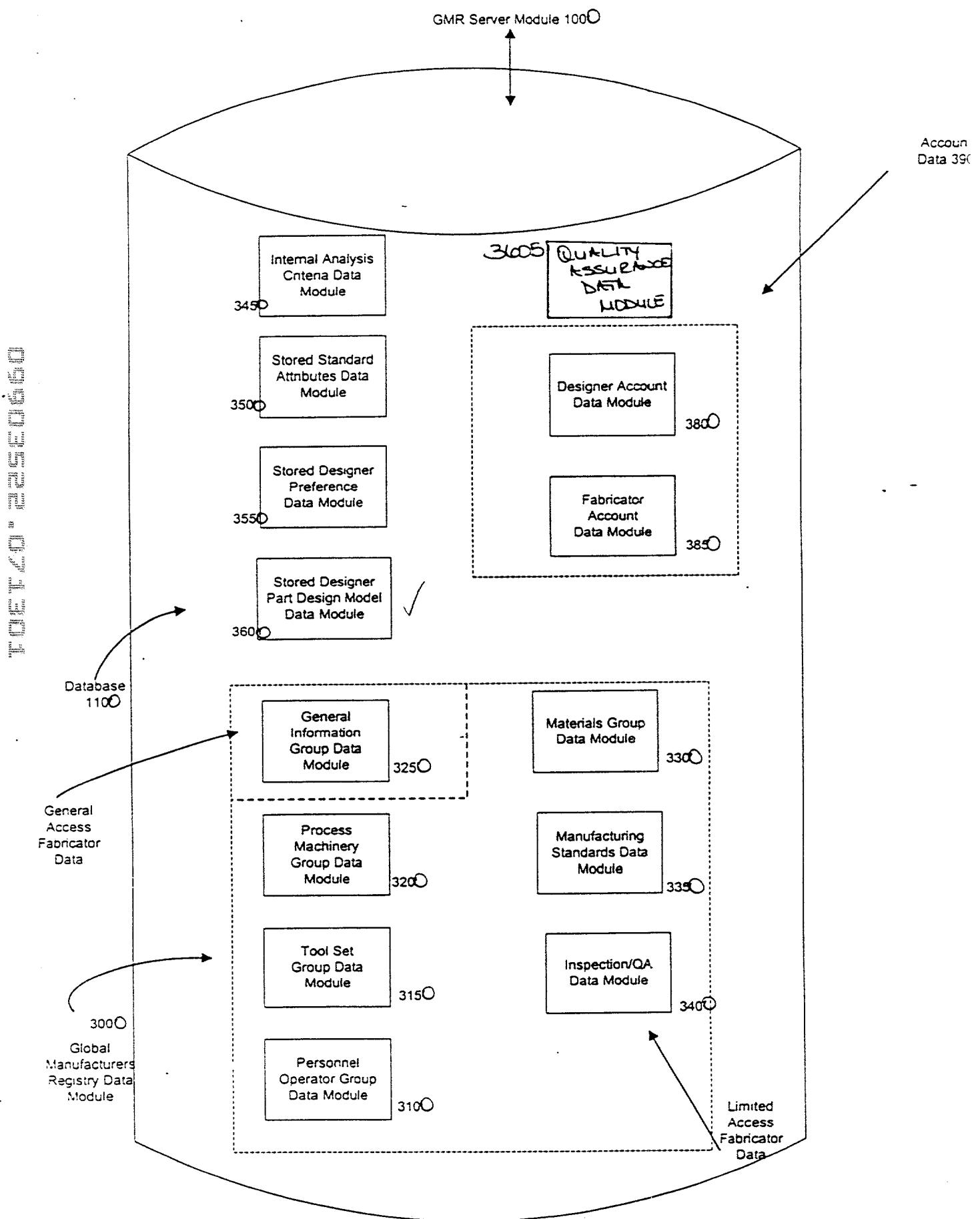


Fig. 22

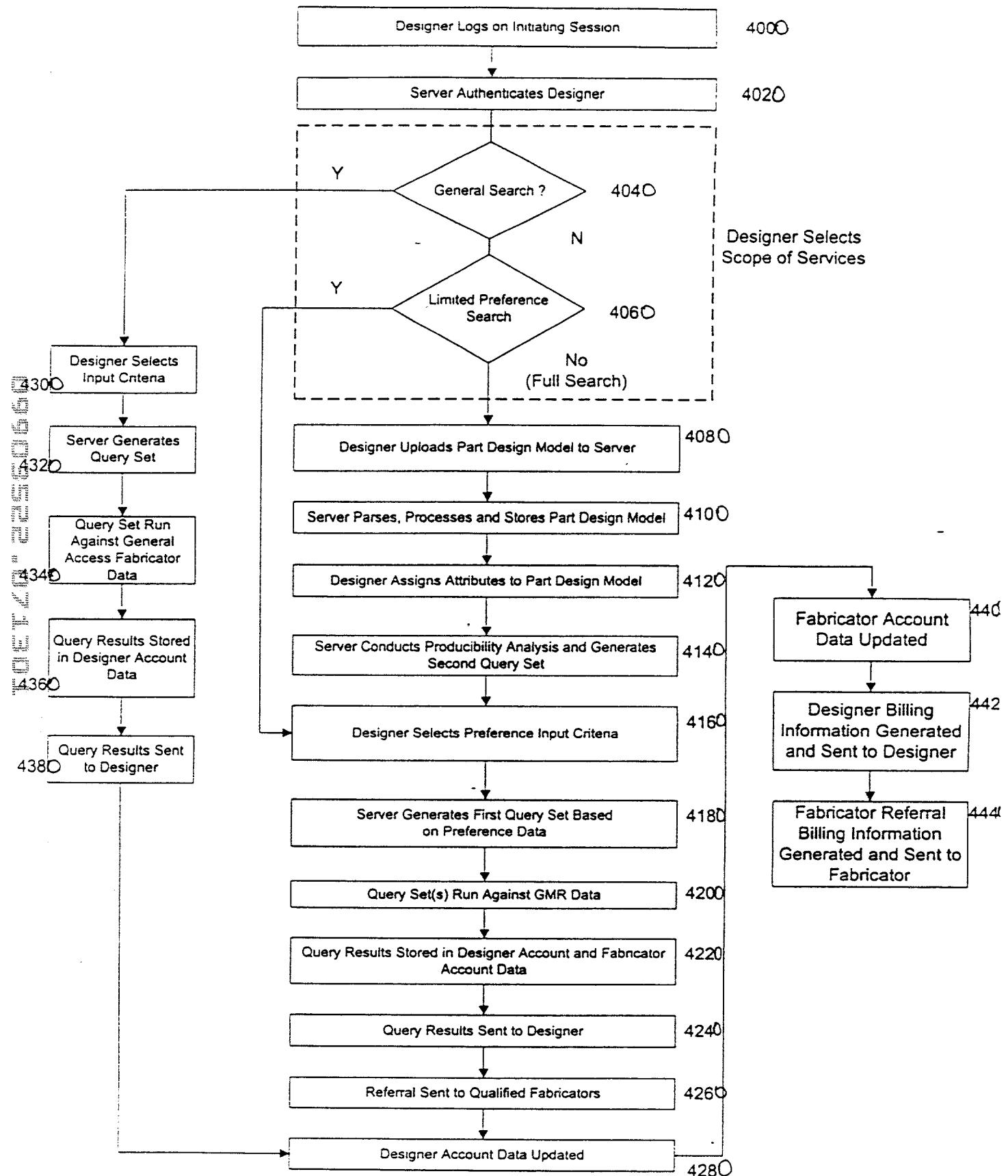


Fig. 23

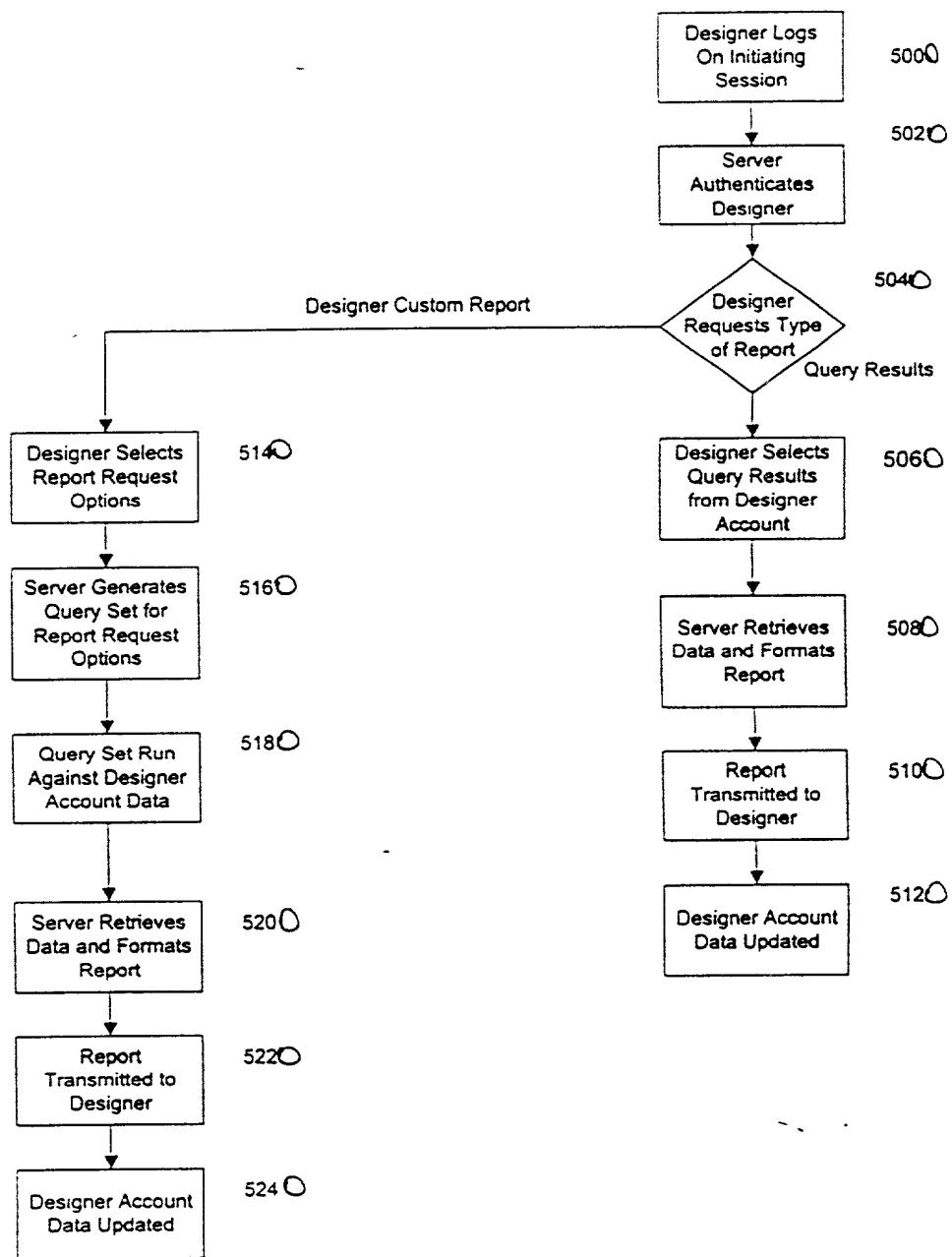


Fig. 24

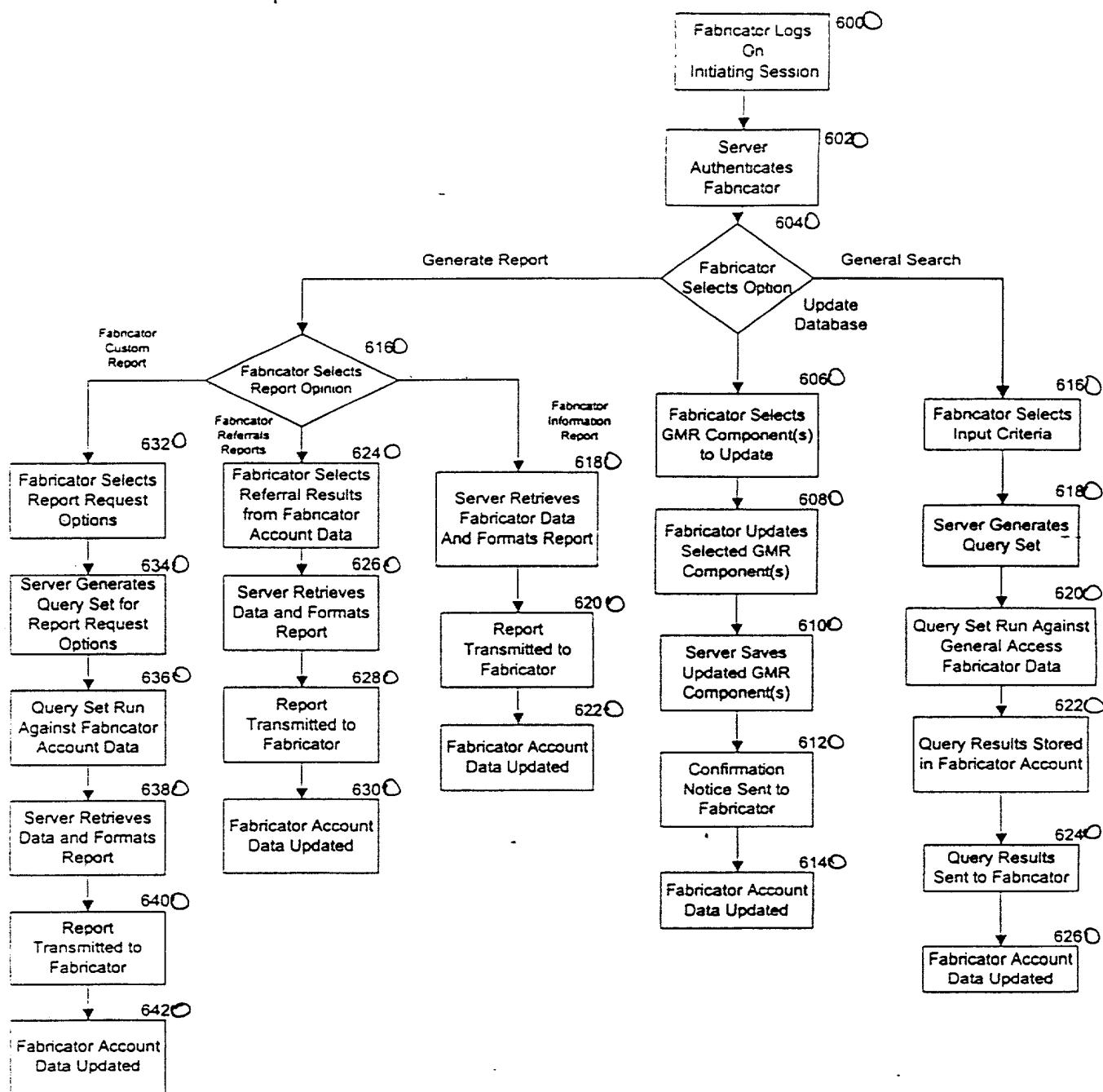
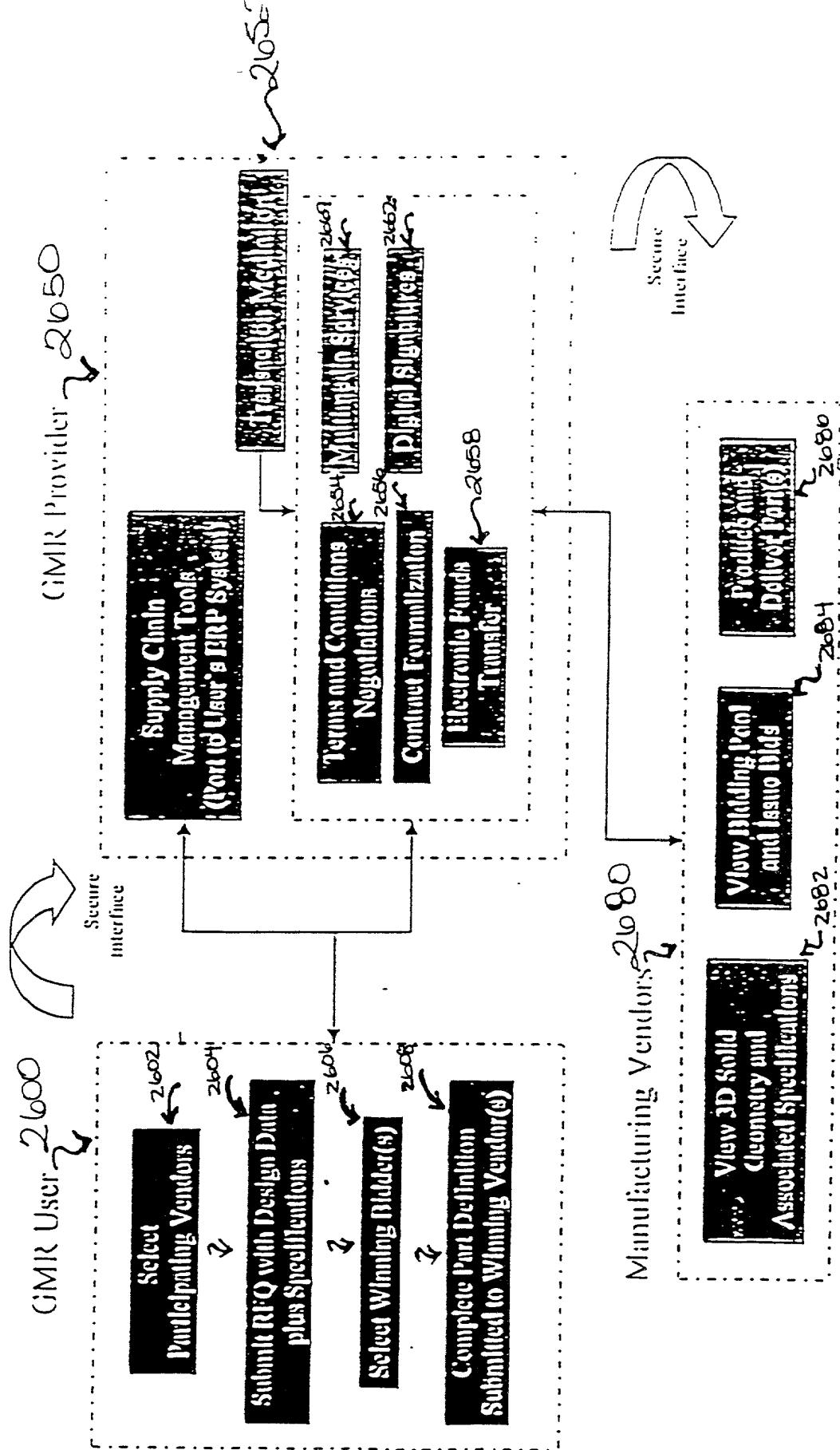


Fig. 25



2720 2750 2700 2710 2740

2750

Manipulation Tools  
Pan, Zoom, and 'Fly Through'

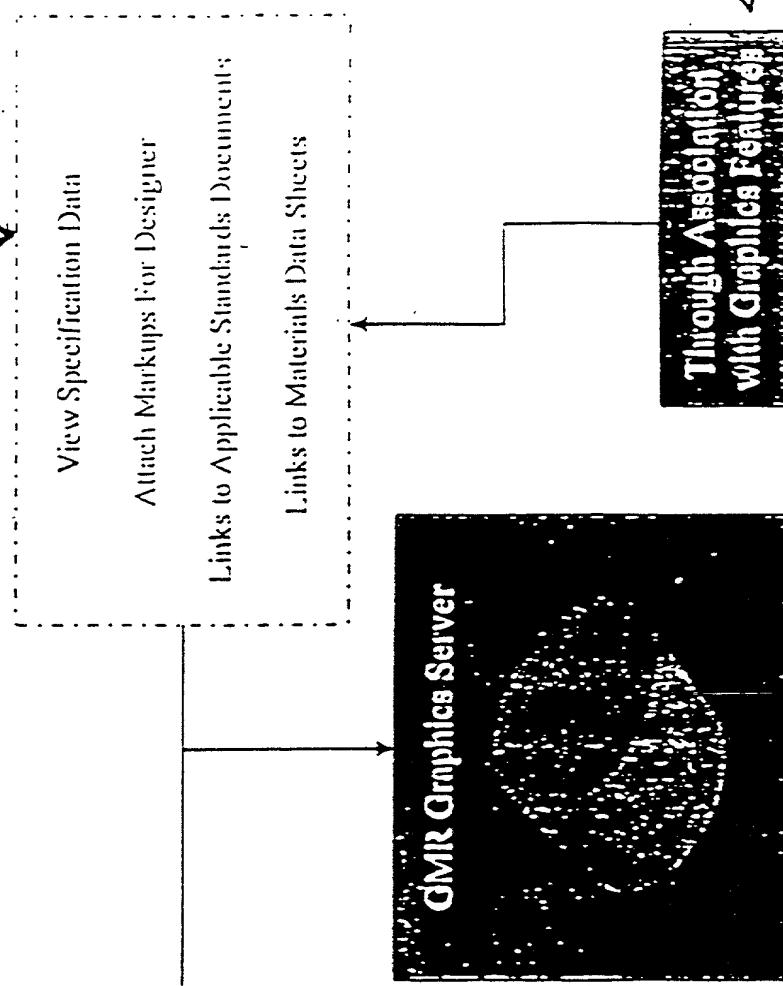
Java 3D Version of Original CAD Model

Java-Enhanced  
Web Browser

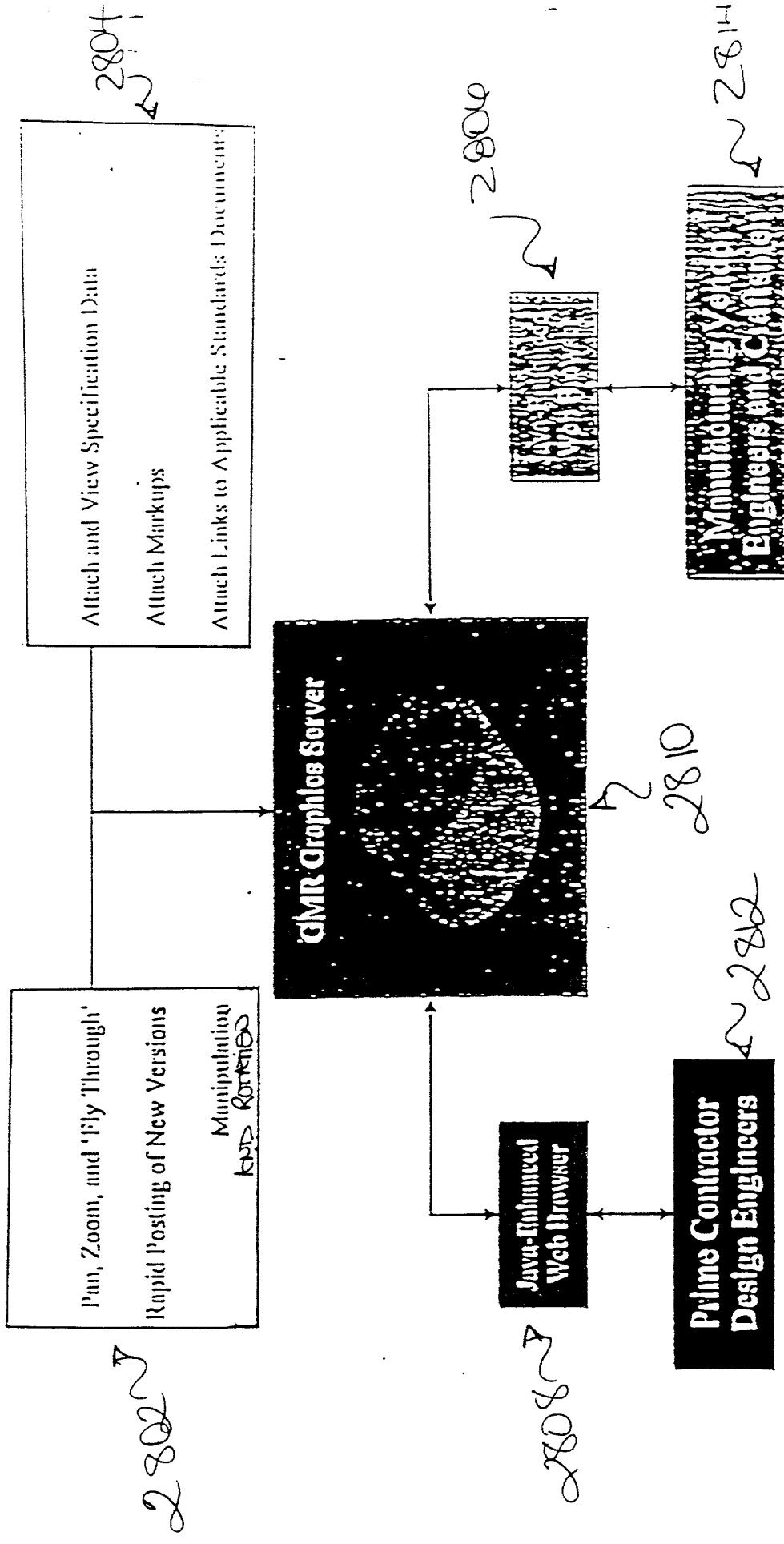
Manufacturing Vendor  
Engineers and Craftsmen

2700

2740  
Through Association  
with Graphics Features



2720 2740 2710 2700 2750



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